

# ▶ LADDERS – EXTENSION

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## Things to Do Before Training

- ▶ Have an extension ladder ready to show to the work crew.
- ▶ Be prepared to talk about jobs on the project for which extension ladders will be used.
- ▶ In the index of the **Cal/OSHA Pocket Guide for the Construction Industry**, look up **Ladder** and read the pages listed.

## Introduction

Falls are the leading cause of construction work-place deaths. One-third of fatal falls to a lower level are from ladders or scaffolds. Ladder accidents occur because workers slip or the ladder slips. Simple precautions can prevent falls from occurring.



## QUESTIONS TO ASK

- ▶ Have you or someone you know had an injury related to an extension ladder? What could have been done to prevent it?
- ▶ What are some examples of potential extension ladder hazards on this job?
- ▶ What are the steps for setting up and using an extension ladder properly?
- ▶ What should we avoid doing when using an extension ladder?
- ▶ How should we get tools or materials up to the location where they are needed without carrying them up the ladder?
- ▶ Are there jobs on this site where it would be safer to use scaffolding, a scissor lift, or boom lift?

# SAFETY BREAK

## ACTIONS TO TAKE

- ▶ Inspect the extension ladder together to make sure it is in good shape. If it is broken or defective, don't use it. Defective ladders should be disposed of properly.
- ▶ Discuss where and how the extension ladder will be used safely on the job.

## Key Points to Keep in Mind

### Examples of Hazards:

- ☐ Broken or defective ladders
- ☐ Ladders on slippery or uneven surfaces
- ☐ Ladder rungs that have mud, grease, or other slippery material on them
- ☐ Carrying tools or materials up or down a ladder
- ☐ Using metal ladders near live electrical parts or within 6 ft of high voltage electrical lines

### Extension Ladder Do's:

- ☐ When using a ladder to climb onto a roof or platform, extend the ladder at least 3 ft past the edge it is resting against.
- ☐ Set up the ladder at a **safe angle**. Put your toes against the bottom of the rails and stretch your arms out at shoulder height. You should be able to grasp the rung with your hands (see front).
- ☐ Use an extension ladder **no longer than 44 ft**.
- ☐ On two-section extension ladders, the sections must overlap at least 3 ft. Overlap must be at least 4 ft for ladders over 33 ft.
- ☐ Locate or create a level and firm surface for the base of the ladder.
- ☐ **Secure the top** and, when feasible, the bottom of the extension ladder.
- ☐ Keep areas at top and bottom clear of debris, material, and other obstructions.
- ☐ Set up a traffic barrier at the base of the ladder.
- ☐ When climbing up or down, always face the extension ladder and maintain **three-point contact** with two hands and a foot or two feet and a hand.
- ☐ Whenever possible, **use extension ladders for access** – not as work platforms. It is often safer to work from scaffolding, a scissor lift, or boom lift.
- ☐ It is a good idea to **wear a safety harness** and tie off to a well-anchored lifeline or other support (not to the ladder) when working higher than 10 ft.
- ☐ Be careful when erecting extension ladders near live overhead powerlines.

### Extension Ladder Don'ts:

- ☐ Don't carry tools, equipment, or material in your hands while climbing. Instead **wear a tool belt** or use a hoist line or gin wheel for lifting and lowering.
- ☐ **Never stand higher than the fourth rung** from the top.
- ☐ Never use metal or metal-reinforced ladders near electrical wires or equipment.
- ☐ **Never reach far to do your work**. If you are leaning to the right, left, or backwards, you should move the ladder into a better position.